

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

BOARD ORDER NO. 6-00-13
WDID NO. 6B369910001

ADELANTO

30-AA-0043

WASTE DISCHARGE REQUIREMENTS
FOR

SAN BERNARDINO COUNTY WASTE SYSTEMS DIVISION
ADELANTO CLASS III LANDFILL

San Bernardino County

The California Regional Water Quality Control Board, Lahontan Region (Regional Board) finds:

1. Discharger

On October 21, 1999 the County of San Bernardino Waste Systems Division submitted a complete application for a Report of Waste Discharge for the closed Adelanto Class III Landfill. For the purpose of this Regional Board Order (Order), the County of San Bernardino is referred to as the "Discharger."

2. Landfill

The Adelanto Class III Landfill stopped receiving waste in October 1978. For the purposes of this Order, the Adelanto Class III Landfill is referred to as the "Landfill."

3. Order History

The Regional Board previously adopted Waste Discharge Requirements (WDRs) for the Landfill under Board Order No. 6-58-13, which was adopted on December 10, 1958. Board Order No. 6-85-70 was adopted on June 13, 1985 to rescind the WDRs for the Adelanto Solid Waste Disposal Site. The site is closed and is no longer being used for disposal of waste. No discharge is presently occurring at the Landfill. The site stopped receiving waste in October 1978.

4. Reason for Action

The Regional Board is issuing Post-Closure Monitoring WDRs to require the Discharger to achieve compliance with the requirements of Sections 20385(a-c), 20415(a-e), 20420(a-k), Title 27, California Code of Regulations (CCR) which requires post-closure monitoring. This Order requires implementing a Detection Monitoring Program (DMP) in accordance with Section 20420 of Title 27.

The Regional Board intends that these Closure WDRs will remain in effect until it is determined there are water quality problems, or a threat of water quality problems, associated with a release from the Landfill by a DMP. After ground water monitoring data are collected and analyzed for at least a three-year period, and there is no threat to ground water, then the WDRs should be evaluated for rescission. If water quality is impacted, or threatened, an Evaluation Monitoring Program (EMP) and/or Corrective Action Program (CAP) may be required.

5. Landfill Location

The Landfill is located west of U.S. Route 395, approximately five miles north of the City of Adelanto, San Bernardino County, within the S 1/2 of Section 31, T7N, R5W, SBB&M, as shown on Attachment "A," which is made part of this Order.

6. Description of Landfill

The Landfill is unlined and received approximately 400,000 to 450,000 cubic yards of waste between 1959 to October 1978. The landfill consisted of approximately 70 percent residential and 30 percent commercial waste. "Burn-out" and "cut-and-cover" waste disposal practices were apparently used to place waste and cover soils.

7. Authorized Disposal Sites

The Landfill is closed and does not continue to receive waste. The footprint of waste shown in Attachment "B" encompasses about 16 acres of the 60-acre parcel. The 16 acres were the only authorized disposal site.

8. Waste Classification

The Landfill received waste derived from the City of Adelanto, George AFB and the surrounding desert communities. The waste is defined in Sections 20220 and 20230, Title 27, CCR, as inert and non-hazardous solid waste, respectively.

9. Waste Management Unit Classification

Pursuant to Section 20260, Title 27, CCR, the Landfill is classified as a Class III waste management unit.

10. Water Quality Protection Standard (WQPS)

The WQPS consists of constituents of concern (including monitoring parameters), concentration limits, monitoring points, and the point of compliance. The standard applies over the compliance period. The constituents of concern, monitoring points, and point of compliance are described in the Monitoring and Reporting Program (MRP) No. 00-13, which is attached to and made a part of this Order. This Order includes a time schedule for the Discharger to propose concentration limits for all constituents of concern.

11. Statistical Methods

Statistical analysis of monitoring data is necessary for the earliest possible detection of a statistically significant release of waste from the Landfill. Section 20420, Title 27, CCR regulations require statistical data analysis. The attached MRP includes general methods for statistical data analysis. This Order also includes a time schedule for the Discharger to submit site-specific statistical methods to be used for monitoring data analysis.

12. Detection Monitoring

Pursuant to Section 20385, Title 27, CCR, the Discharger has proposed a DMP. Currently, the site does not have a DMP to monitor the ground water for evidence of a release at the site. This Order includes a time schedule for the submittal of a DMP for the ground water and unsaturated zone.

13. Evaluation Monitoring

An EMP may be required, pursuant to Section 20425, Title 27, CCR, to evaluate evidence of a release if detection monitoring and/or verification procedures indicate evidence of a release.

14. Corrective Action

A CAP to remediate detected releases from the Landfill may be required pursuant to Section 20430, Title 27 CCR, should results of an EMP warrant a CAP.

15. Site Geology

The closed site is underlain by alluvial fan deposits of sand, silt and gravel that overlie a basement complex of the Shadow Mountains, which is part of the Oro Grande Formation. The Shadow Mountains are composed of limestone, dolomite, marble, hornfels, phyllite, schist, and quartzite metasedimentary rocks. The thickness of alluvium is unknown at the site, but it is estimated to range from a few feet in the western portion of the site to about 150 feet at the eastern edge of the site.

16. Site Hydrogeology

Depth to ground water from three new monitoring wells installed at the site ranged from 97 to 198 feet below ground surface in December 1999. A well approximately 4,000 feet east of the Landfill contains ground water at a depth of 230 feet below ground surface (measured in 1961). Ground water beneath the site is believed to flow to the north-northeast direction.

17. Site Surface Hydrology and Storm Water Runoff

There is no perennial surface water at the site. Surface water during storm events flows from the site towards the Mojave River, in the Fremont Wash. All storm water from the Landfill is regulated under the state Amended General Industrial Activities Storm Water Permit.

18. Site Topography

Site topography is shown on Attachment "B", which is made a part of this Order.

19. Climatology

The precipitation in the area of the Landfill is approximately 4.2 inches annually. The evaporation rate is approximately 102 inches annually.

20. Land Uses

The land uses at and surrounding the Landfill consists of the following:

- a. various maintained residences and commercial buildings in the City of Adelanto;
- b. open desert land.

21. Monitoring System Work Plan

The Discharger has submitted a Work Plan for Investigation and Installation of a Monitoring System at the Adelanto Landfill. The monitored media include the unsaturated zone (soil-gas) and ground water. The Discharger started implementing the Work Plan in December 1999.

22. Receiving Waters

The receiving waters are the ground waters of the Upper Mojave Hydrologic Area of the Mojave Hydrologic Unit (Department of Water Resources Hydrologic Unit No. 628.20).

23. South Lahontan Basin Plan

The Regional Board adopted a Water Quality Control Plan for the Lahontan Basin (Basin Plan) which became effective on March 31, 1995. This Order implements the Basin Plan.

24. Beneficial Ground Water Uses

The present and probable beneficial uses of the ground waters of the Upper Mojave Hydrologic Area of the Mojave Hydrologic Unit as set forth and defined in the Basin Plan are:

- a. municipal and domestic supply;
- b. agricultural supply;
- c. industrial service supply; and
- d. freshwater replenishment.

25. California Environmental Quality Act

These WDRs govern an existing closed Landfill that the Discharger formerly operated. The project consists only of the inactive status of the closed Landfill and is therefore exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) in accordance with Section 15301, Chapter 3, Title 14, CCR.

26. Notification of Interested Parties

The Regional Board has notified the Discharger and all known interested agencies and persons of its intent to adopt WDRs for the project.

27. Consideration of Interested Parties

The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the Discharger shall comply with the following:

I. DISCHARGE SPECIFICATIONS

A. Receiving Water Limitations

Discharges from the closed Landfill shall not cause the presence of the following substances or conditions in ground waters of the Mojave Hydrologic Unit:

1. any perceptible color, odor, taste, or foaming;
2. any presence of toxic substances in concentrations that individually, collectively, or cumulatively cause detrimental physiological response in humans, plants, animals, or aquatic life; and
3. the presence of constituents of concern in concentrations that exceed background levels.

II. REQUIREMENTS AND PROHIBITIONS

A. General

1. Discharges from the closed Landfill shall not cause a pollution as defined in Section 13050 of the California Water Code, or a threatened pollution.
2. The discharge shall not cause a nuisance as defined in Section 13050 of the California Water Code.
3. The discharge of solid wastes, leachate, or any other deleterious material to the ground waters of the Mojave Hydrologic Unit is prohibited.
4. The closed Landfill shall be protected from inundation, washout, or erosion of wastes and erosion of covering material resulting from a storm or a flood having a recurrence interval of once in 100 years.

5. Surface drainage from tributary areas, and internal site drainage from surface or subsurface sources shall not contact or percolate through solid wastes discharged at the closed site.
6. The exterior surfaces of the closed disposal site shall be graded to promote lateral runoff of precipitation and to prevent ponding.
7. Water used for dust control during disposal site operations shall be limited to a minimal amount. A "minimal amount" is defined as that amount which will not result in runoff.
8. All water used for dust control shall not contain detectable concentrations of volatile organic constituents (VOCs).
9. The discharge of wastes in a manner that does not maintain a five-foot soil separation between the wastes and the seasonal high ground water elevation is prohibited.
10. At any given time, the concentration limit for each constituent of concern shall be equal to the background value of that constituent.
11. The concentration limits for each constituent of concern in ground water shall not be exceeded.

B. Detection Monitoring Program

The Discharger shall implement a DMP as required in Section 20420 of Title 27, CCR.

C. Evaluation Monitoring Program

The Discharger shall establish an EMP whenever there is statistically significant evidence of a release from the Landfill as required in Section 20425, Title 27, CCR

D. Corrective Action Program

The Discharger shall institute a CAP when required pursuant to Section 20430, Title 27 CCR, should results of an EMP warrant a CAP.

III. DATA ANALYSIS

A. Statistical Analysis

Statistical analysis of ground water DMP data shall be conducted. Analysis shall be conducted in accordance with statistical methods detailed in the attached MRP.

B. Nonstatistical Analysis

Nonstatistical analysis of ground water and unsaturated zone DMP data shall be conducted. Analysis shall be conducted in accordance with statistical methods detailed in the attached MRP.

C. Verification Procedures

1. The Discharger shall immediately initiate verification procedures as specified below whenever there is a determination by the Discharger or Executive Officer that there is statistical or non-statistical evidence of a release. If the Discharger declines the opportunity to conduct verification procedures, the Discharger shall submit a technical report as described below under the heading Technical Report Without Verification Procedures.
2. The verification procedure shall only be performed for the constituent(s) that has shown evidence of a release, and shall be performed for those monitoring points at which a release is indicated.
3. The Discharger shall either conduct a composite retest using data from the initial sampling event with all data obtained from the resampling event or shall conduct a discrete retest in which only data obtained from the resampling event shall be analyzed in order to verify evidence of a release.
4. The Discharger shall report to the Regional Board by certified mail the results of the verification procedure, as well as all concentration data collected for use in the retest within seven days of the last laboratory analysis.
5. The Discharger shall determine, within 45 days after completion of sampling, whether there is statistically significant evidence of a release from the Landfill at each monitoring point. If there is statistically significant evidence of a release, the Discharger shall immediately notify the Regional Board by certified mail. The Executive Officer may make an independent finding that there is statistical evidence of a release.
6. If the Discharger or Executive Officer verifies evidence of a release, the Discharger is required to submit, within 90 days of a determination that there is or was a release, a technical report pursuant to Section 13267(b) of the California Water Code. The report shall propose an evaluation monitoring program **OR** make a demonstration to the Regional Board that there is a source other than the Landfill that caused evidence of a release.

D. Technical Report Without Verification Procedures

If the Discharger chooses not to initiate verification procedures, a technical report shall be submitted pursuant to Section 13267(b) of the California Water Code. The report shall propose an EMP, **OR**, attempt to demonstrate that the release did not originate from the Landfill.

IV. PROVISIONS

A. Standard Provisions

The Discharger shall comply with the "Standard Provisions for WDRs," dated September 1, 1994, in Attachment "C", which is made part of this Order with the exception of Standard Provision Item No. 12.

B. Monitoring and Reporting

1. Pursuant to the California Water Code Section 13267(b), the Discharger shall comply with the attached MRP as specified by the Executive Officer.
2. The Discharger shall comply with the "General Provisions for Monitoring and Reporting," dated September 1, 1994, which is attached to and made part of the MRP.

V. TIME SCHEDULE

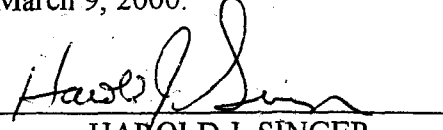
A. Water Quality Protection Standard

1. The Discharger shall submit a technical report by **July 1, 2001** for approval by the Regional Board staff listing Constituents of Concern for each medium, including a data analysis method for each Monitoring Parameter, and a Water Quality Protection Standard, which includes concentration limits that define background water quality for all constituents of concern, by the date indicated in the MRP.
2. The Discharger shall submit a Technical Report by **July 1, 2000** discussing the work performed, regarding installation of the Detection Monitoring System. The report shall include maps, figures, logs, as-builts, conclusions and recommendations from the Investigation and Installation of the Detection Monitoring System.

B. Additional Technical Reports

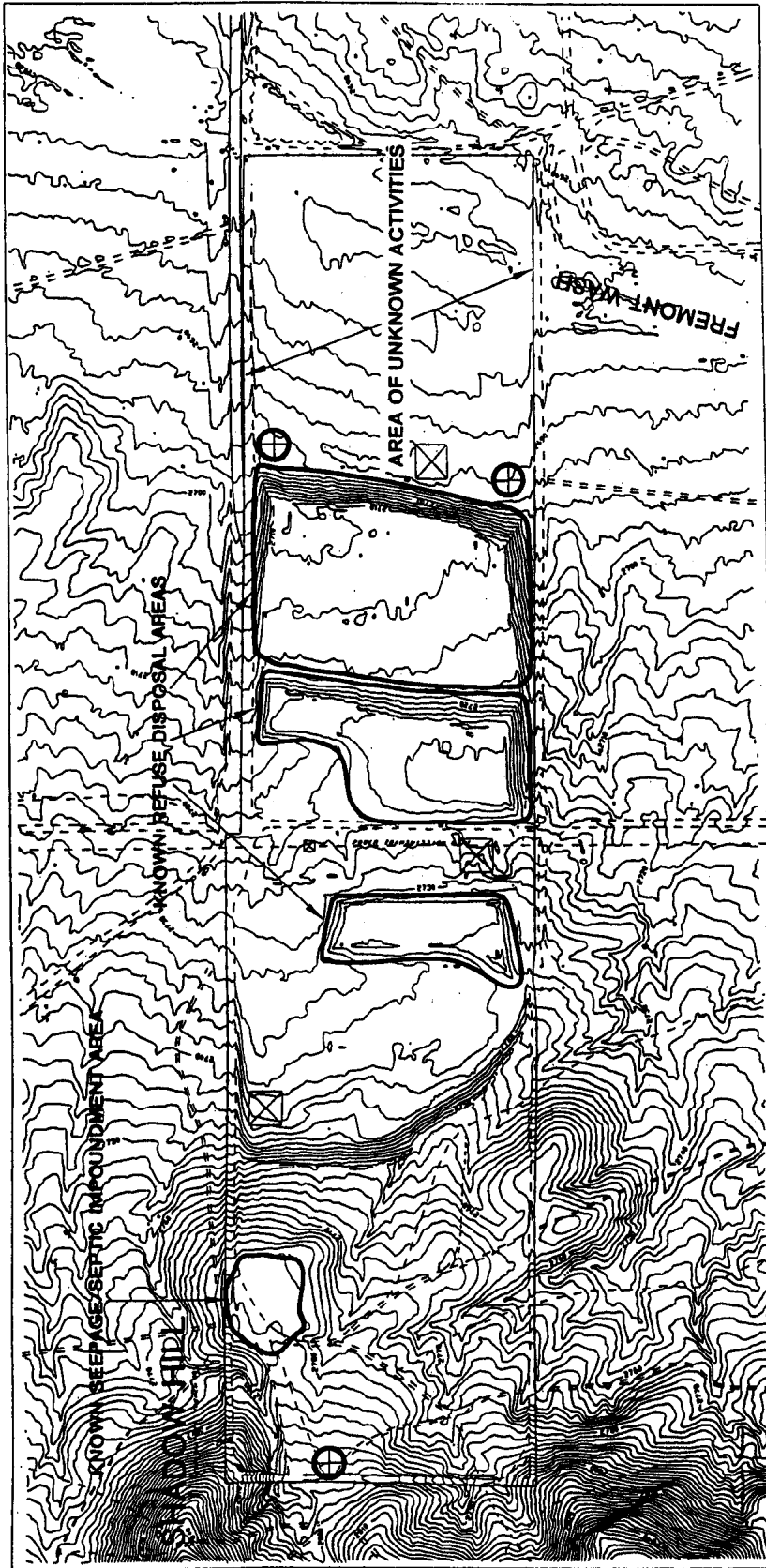
The Discharger shall submit an additional Technical Report by **July 1, 2000**, to evaluate surface drainage issues identified in General Requirements, Section II a, 4, 5, and 6.

I, Harold J. Singer, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by California Regional Water Quality Control Board, Lahontan Region, on March 9, 2000.




HAROLD J. SINGER
EXECUTIVE OFFICER

- Attachments:
- A. Location Map
 - B. Landfill Footprint of Waste
 - C. Standard Provisions for WDRs

ATTACHMENT B



Explanation:

-  PROPOSED GROUNDWATER MONITORING WELL
-  PROPOSED SOIL-PORE GAS PROBE

MONITORING WELL/GAS PROBE LOCATION MAP

ADRIANO DISPOSAL SITE - DETECTION MONITORING PROGRAM
 Adrien, California
 For: Norcal/San Bernardino, Inc.
 Converse Consultants

0 700 1400
 APPROXIMATE SCALE IN FEET

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

STANDARD PROVISIONS
FOR WASTE DISCHARGE REQUIREMENTS

ATTACHMENT "C"

1. **Inspection and Entry**

The Discharger shall permit Regional Board staff:

- a. to enter upon premises in which an effluent source is located or in which any required records are kept;
- b. to copy any records relating to the discharge or relating to compliance with the Waste Discharge Requirements;
- c. to inspect monitoring equipment or records; and
- d. to sample any discharge.

2. **Reporting Requirements**

- a. Pursuant to California Water Code 13267(b), the Discharger shall immediately notify the Regional Board by telephone whenever an adverse condition occurred as a result of this discharge; written confirmation shall follow within two weeks. An adverse condition includes, but is not limited to, spills of petroleum products or toxic chemicals, or damage to control facilities that could affect compliance.
- b. Pursuant to California Water Code Section 13260(c), any proposed material change in the character of the waste, manner or method of treatment or disposal, increase of discharge, or location of discharge, shall be reported to the Regional Board at least 120 days in advance of implementation of any such proposal. This shall include, but not limited to, all significant soil disturbances.
- c. The Owners/Discharger of property subject to Waste Discharge Requirements shall be considered to have a continuing responsibility for ensuring compliance with applicable Waste Discharge Requirements in the operations or use of the owned property. Pursuant to California Water Code Section 13260(c), any change in the ownership and/or operation of property subject to the Waste Discharge Requirements shall be reported to the Regional Board. Notification of applicable Waste Discharge Requirements shall be furnished in writing to the new owners and/or operators and a copy of such notification shall be sent to the Regional Board.
- d. If a Discharger becomes aware that any information submitted to the Regional Board is incorrect, the Discharger shall immediately notify the Regional Board, in writing and correct that information.
- e. Reports required by the Waste Discharge Requirements, and other information requested by the Regional Board, must be signed by a duly authorized representative of the Discharger. Under Section 13268 of the California Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1,000) for each day of violation.

- f. If the Discharger becomes aware that their Waste Discharge Requirements (or permit) is no longer needed (because the project will not be built or the discharge will cease) the Discharger shall notify the Regional Board in writing and request that their Waste Discharge Requirements (or permit) be rescinded.

3. Right to Revise Waste Discharge Requirements

The Regional Board reserves the privilege of changing all or any portion of the Waste Discharge Requirements upon legal notice to and after opportunity to be heard is given to all concerned parties.

4. Duty to Comply

Failure to comply with the Waste Discharge Requirements may constitute a violation of the California Water Code and is grounds for enforcement action or for permit termination, revocation and reissuance, or modification.

5. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of the Waste Discharge Requirements which has a reasonable likelihood of adversely affecting human health or the environment.

6. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the Waste Discharge Requirements. Proper operation and maintenance includes adequate laboratory control, where appropriate, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by the Discharger, when necessary to achieve compliance with the conditions of the Waste Discharge Requirements.

7. Waste Discharge Requirement Actions

The Waste Discharge Requirements may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for waste discharge requirement modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any of the Waste Discharge Requirements conditions.

8. Property Rights

The Waste Discharge Requirements do not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

9. Enforcement

The California Water Code provides for civil liability and criminal penalties for violations or threatened violations of the Waste Discharge Requirements including imposition of civil liability or referral to the Attorney General.

10. Availability

A copy of the Waste Discharge Requirements shall be kept and maintained by the Discharger and be available at all times to operating personnel.

11. Severability

Provisions of the Waste Discharge Requirements are severable. If any provision of the requirements is found invalid, the remainder of the requirements shall not be affected.

12. Public Access

General public access shall be effectively excluded from disposal/treatment facilities.

13. Transfers

Providing there is no material change in the operation of the facility, this Order may be transferred to a new owner or operator. The owner/operator must request the transfer in writing and receive written approval from the Regional Board's Executive Officer.

14. Definitions

- a. "Surface waters" as used in this Order, include, but are not limited to, live streams, either perennial or ephemeral, which flow in natural or artificial water courses and natural lakes and artificial impoundments of waters. "Surface waters" does not include artificial water courses or impoundments used exclusively for wastewater disposal.
- b. "Ground waters" as used in this Order, include, but are not limited to, all subsurface waters being above atmospheric pressure and the capillary fringe of these waters.

15. Storm Protection

- a. All facilities used for collection, transport, treatment, storage, or disposal of waste shall be adequately protected against overflow, washout, inundation, structural damage or a significant reduction in efficiency resulting from a storm or flood having a recurrence interval of once in 100 years.